

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-2. (Cancelled)

3. (Previously Presented) A method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, wherein the first and second air interfaces are distinct such that one is a TDMA air interface and the other is a CDMA air interface, the method comprising:

- (a) receiving signals over the second air interface from the second base station;
 - (b) evaluating a characteristic of the signals;
 - (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
 - (d) camping on a cell associated with the second base station,
- wherein evaluating the characteristic comprises applying a CDMA path loss criterion to the signals.

4.-6. (Cancelled)

7. (Previously Presented) A method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

- (a) receiving signals over the second air interface from the second base station;

- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein selecting the second base station in place of the first base station comprises using a single radio resource management protocol layer in the mobile station supporting both GSM/TDMA and CDMA operating modes and the radio resource management protocol layer comprises parallel GSM and CDMA protocol sublayers and a combiner sublayer which selects either the GSM or the CDMA operation mode.

8. (Original) A method according to claim 7, wherein the combiner sublayer receives messages from a mobility management protocol layer at a service access point in accordance with GSM standards, and maps the messages to primitives which it directs to the selected GSM or CDMA sublayer.

9.-19. (Cancelled)

20. (Previously Presented) A method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended comprises setting a sampling rate at which to receive the signals responsive to the desired level of energy consumption.

21. (Previously Presented) A method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended comprises choosing a number of the base stations of the second type from which to receive the signals responsive to the desired level of energy consumption.

22. (Previously Presented) A method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended further comprises regulating the

availability of the mobile station to receive the signals responsive to a desired level of quality of service provided by the mobile station.

23.-27. (Cancelled)

28. (Previously Presented) A method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein evaluating the characteristic comprises comparing the signals received from the second base station to signals received over the first air interface from the first base station and applying reselection criteria to the received signals so as to determine whether to select the second base station and wherein applying the criteria comprises applying a predetermined hysteresis factor so as to prevent recurrent reselection of the air interface.

29.-51. (Cancelled)

52. (Previously Presented) A mobile station for use in a mobile wireless telecommunications system that includes a first cell associated with a first air interface and a second cell associated with a second air interface, the mobile station, comprising:

- (a) at least one radio transceiver, which receives signals from the first and second cells over the first and second air interfaces, respectively; and
- (b) control circuitry that processes the signal received from the second cell while the mobile station is camped in idle mode on the first cell and that evaluates the second signal and, responsive thereto, directs the mobile station to reselect and camp on the second cell,

wherein the control circuitry is programmed to regulate energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station, and

wherein the control circuitry sets a sampling rate at which to receive the signals responsive to the desired level of energy consumption.

53. (Previously Presented) A mobile station for use in a mobile wireless telecommunications system that includes a first cell associated with a first air interface and a second cell associated with a second air interface, the mobile station, comprising:

(a) at least one radio transceiver, which receives signals from the first and second cells over the first and second air interfaces, respectively; and

(b) control circuitry that processes the signal received from the second cell while the mobile station is camped in idle mode on the first cell and that evaluates the second signal and, responsive thereto, directs the mobile station to reselect and camp on the second cell,

wherein the control circuitry is programmed to regulate energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station, and

wherein the control circuitry chooses a number of cells from which to receive the signals over the second air interface responsive to the desired level of energy consumption.

54. (Previously Presented) A mobile station for use in a mobile wireless telecommunications system that includes a first cell associated with a first air interface and a second cell associated with a second air interface, the mobile station, comprising:

(a) at least one radio transceiver, which receives signals from the first and second cells over the first and second air interfaces, respectively; and

(b) control circuitry that processes the signal received from the second cell while the mobile station is camped in idle mode on the first cell and that evaluates the second signal and, responsive thereto, directs the mobile station to reselect and camp on the second cell,

wherein the control circuitry is programmed to regulate energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station, and

wherein the control circuitry further regulates the availability of the transceiver to receive the signals responsive to a desired level of quality of service provided by the mobile station.

55.-59. (Cancelled)

60. (Previously Presented) A mobile station in a mobile wireless telecommunications system, the system including a first cell associated with a first air interface and a second cell associated with a second air interface, the mobile station comprising:

(a) at least one radio transceiver that receives signals from the first and second cells over the first and second air interfaces, respectively; and

(b) control circuitry that processes the signal received from the second cell while the mobile station is camped in idle mode on the first cell and that evaluates the second signal and, responsive thereto, directs the mobile station to reselect and camp on the second cell,

wherein the control circuitry compares the signals received by the transceiver over the first and second air interfaces and applies reselection criteria to the comparison so as to determine whether to select the second cell, and

wherein the control circuitry applies a predetermined hysteresis factor to the comparison so as to prevent recurrent reselection of the air interface.

61.-74. (Cancelled)

75. (New) An apparatus used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the apparatus camped on a cell associated with a first base station of the first type, the apparatus performing a method for reselection of a second base station of the second type, wherein the first and second air interfaces are distinct such that one is a TDMA air interface and the other is a CDMA air interface, the apparatus comprising:

(a) means for receiving signals over the second air interface from the second base station;

- (b) means for evaluating a characteristic of the signals;
- (c) responsive to the characteristic, means for selecting the second base station in place of the first base station; and
- (d) means for camping on a cell associated with the second base station, wherein evaluating the characteristic comprises applying a CDMA path loss criterion to the signals.

76. (New) A computer readable medium containing executable instructions, which, when executed in a processing system, cause the system to perform a method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, wherein the first and second air interfaces are distinct such that one is a TDMA air interface and the other is a CDMA air interface, the method comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and

(d) camping on a cell associated with the second base station, wherein evaluating the characteristic comprises applying a CDMA path loss criterion to the signals.

77. (New) An apparatus used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the apparatus camped on a cell associated with a first base station of the first type, the apparatus performing a method for reselection of a second base station of the second type, the apparatus comprising:

- (a) means for receiving signals over the second air interface from the second base station;
- (b) means for evaluating a characteristic of the signals;

(c) responsive to the characteristic, means for selecting the second base station in place of the first base station; and

(d) means for camping on a cell associated with the second base station,

wherein selecting the second base station in place of the first base station comprises using a single radio resource management protocol layer in the mobile station supporting both GSM/TDMA and CDMA operating modes and the radio resource management protocol layer comprises parallel GSM and CDMA protocol sublayers and a combiner sublayer which selects either the GSM or the CDMA operation mode.

78. (New) An apparatus according to claim 77, wherein the combiner sublayer receives messages from a mobility management protocol layer at a service access point in accordance with GSM standards, and maps the messages to primitives which it directs to the selected GSM or CDMA sublayer.

79. (New) A computer readable medium containing executable instructions, which, when executed in a processing system, cause the system to perform a method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

(a) receiving signals over the second air interface from the second base station;

(b) evaluating a characteristic of the signals;

(c) responsive to the characteristic, selecting the second base station in place of the first base station; and

(d) camping on a cell associated with the second base station,

wherein selecting the second base station in place of the first base station comprises using a single radio resource management protocol layer in the mobile station supporting both GSM/TDMA and CDMA operating modes and the radio resource management protocol layer comprises parallel GSM and CDMA protocol sublayers and a combiner sublayer which selects either the GSM or the CDMA operation mode.

80. (New) The computer readable medium according to claim 79, wherein the combiner sublayer receives messages from a mobility management protocol layer at a service access point in accordance with GSM standards, and maps the messages to primitives which it directs to the selected GSM or CDMA sublayer.

81. (New) An apparatus used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the apparatus camped on a cell associated with a first base station of the first type, the apparatus performing a method for reselection of a second base station of the second type, the apparatus comprising:

(a) means for receiving signals over the second air interface from the second base station;

(b) means for evaluating a characteristic of the signals;

(c) responsive to the characteristic, means for selecting the second base station in place of the first base station; and

(d) means for camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended comprises setting a sampling rate at which to receive the signals responsive to the desired level of energy consumption.

82. (New) A computer readable medium containing executable instructions, which, when executed in a processing system, cause the system to perform a method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

(a) receiving signals over the second air interface from the second base station;

(b) evaluating a characteristic of the signals;

(c) responsive to the characteristic, selecting the second base station in place of the first base station; and

(d) camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended comprises setting a sampling rate at which to receive the signals responsive to the desired level of energy consumption.

83. (New) An apparatus used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the apparatus camped on a cell associated with a first base station of the first type, the apparatus performing a method for reselection of a second base station of the second type, the apparatus comprising:

(a) means for receiving signals over the second air interface from the second base station;

(b) means for evaluating a characteristic of the signals;

(c) responsive to the characteristic, means for selecting the second base station in place of the first base station; and

(d) means for camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended comprises choosing a number of the base stations of the second type from which to receive the signals responsive to the desired level of energy consumption.

84. (New) A computer readable medium containing executable instructions, which, when executed in a processing system, cause the system to perform a method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

(a) receiving signals over the second air interface from the second base station;

- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended comprises choosing a number of the base stations of the second type from which to receive the signals responsive to the desired level of energy consumption.

85. (New) An apparatus used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the apparatus camped on a cell associated with a first base station of the first type, the apparatus performing a method for reselection of a second base station of the second type, the apparatus comprising:

- (a) means for receiving signals over the second air interface from the second base station;
- (b) means for evaluating a characteristic of the signals;
- (c) means for responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) means for camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended further comprises regulating the availability of the mobile station to receive the signals responsive to a desired level of quality of service provided by the mobile station.

86. (New) A computer readable medium containing executable instructions, which, when executed in a processing system, cause the system to perform a method used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a

first base station of the first type, the method for reselection of a second base station of the second type, the method comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein receiving the signals comprises regulating energy expended by the mobile station in receiving the signals responsive to a desired level of energy consumption by the mobile station and wherein regulating the energy expended further comprises regulating the availability of the mobile station to receive the signals responsive to a desired level of quality of service provided by the mobile station.

87. (New) An apparatus used in a mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the apparatus camped on a cell associated with a first base station of the first type, the apparatus performing a method for reselection of a second base station of the second type, the apparatus comprising:

- (a) means for receiving signals over the second air interface from the second base station;
- (b) means for evaluating a characteristic of the signals;
- (c) responsive to the characteristic, means for selecting the second base station in place of the first base station; and
- (d) means for camping on a cell associated with the second base station,

wherein evaluating the characteristic comprises comparing the signals received from the second base station to signals received over the first air interface from the first base station and applying reselection criteria to the received signals so as to determine whether to select the second base station and wherein applying the criteria comprises applying a predetermined hysteresis factor so as to prevent recurrent reselection of the air interface.

88. (New) A computer readable medium containing executable instructions, which, when executed in a processing system, cause the system to perform a method used in a

mobile wireless telecommunications system that includes base stations of a first type operating over a first air interface and base stations of a second type operating over a second air interface, the method performed by a mobile station camped on a cell associated with a first base station of the first type, the method for reselection of a second base station of the second type, comprising:

- (a) receiving signals over the second air interface from the second base station;
- (b) evaluating a characteristic of the signals;
- (c) responsive to the characteristic, selecting the second base station in place of the first base station; and
- (d) camping on a cell associated with the second base station,

wherein evaluating the characteristic comprises comparing the signals received from the second base station to signals received over the first air interface from the first base station and applying reselection criteria to the received signals so as to determine whether to select the second base station and wherein applying the criteria comprises applying a predetermined hysteresis factor so as to prevent recurrent reselection of the air interface.